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**The ILLINOIS ENGINEER**  
ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS  
INCORPORATED  
*Affiliated with the National Society of Professional Engineers*  
817 Myers Building Springfield, Illinois



SUMMER

AUGUST, 1958

# RESIDENT'S MESSAGE

By FRANK W. EDWARDS

## COMPENSATION FOR ENGINEERING SERVICES

Engineering is a profession which requires of its members personal ability, honesty and integrity, together with sound technical training and broad qualifying experience. Selection of engineers for professional assignments, either as employees or as consultants for individual projects, should be made on the basis of these qualities. Salaries and fees are of secondary importance in making selections. However, sound engineering thought and adequate engineering services should be furnished consistently when adequate compensation is provided for the engineer. It is true whether the engineer is an employee receiving a salary or a consultant receiving a fee. Engineering services involve not only knowledge and experience but require thorough investigations and detailed studies and analyses. Only competent engineers can perform such services, and the supply of highly qualified persons over the years depends to a large extent on the financial rewards which may be anticipated. Intangible rewards for engineers are many, but most will agree a reasonably good living is important. If investigations, studies and analyses are slighted in order to reduce engineering costs the owner or client suffers. Intelligent decisions can be made only after thorough detailed engineering work. Good engineering often saves many times its cost through proper design which in turn leads to economical construction. As engineers, we are at fault in not explaining these facts sufficiently to the general public. Lack of understanding by the layman, as well as some engineers, has resulted or condoned bidding on a price basis for engineering services. Bidding on a price basis for engineering services is neither in the public interest nor the engineer's interest. The general public does not understand why this is true. Many engineers also seem ignorant of the fact.



(Continued on Page 3)

## ISPE WELCOMES NEW EXECUTIVE SECRETARY

SEE STORY AND PICTURE—PAGE 2

## REGISTRATION BOOK NOW AVAILABLE

Engineers in Industry should be encouraged and stimulated to become registered. NSPE has a new pamphlet titled "Q and A about Registration for Engineers in Industry," of which chapter presidents have sample copies to place in the hands of key industry men.

Members who are in supervisory positions should order a quantity of these pamphlets for non-registered engineers in their departments. Members employed in an industry where there are many unregistered fellow engineers can do these men and their profession a great service by suggesting to their supervisor that he avail himself of these booklets for his employees. See your chapter president for a copy if you know where these books can be effectively used.

Quantities of these books may be ordered from National Society of Professional Engineers, 2029 K Street, N.W., Washington, D. C., at no cost for distribution to engineers employed in industry.

## TABLE OF CONTENTS

ISPE Welcomes New Executive Secretary.....	2
New Members.....	3
Is Unionism of the Engineer in Conflict With Professionalism?.....	4
Inspection Boat Trip.....	6
Want to Go on Record?.....	7
Is the Illinois P. E. Act Strong?.....	8
News of the Chapters.....	9
Registration Examinations.....	13
Does an Engineer Have a Right to Be Called a Professional Man?.....	14
Constitution Committee Sets Timetable.....	17

## SUBSCRIPTION RATES

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# ISPE WELCOMES NEW EXECUTIVE SECRETARY

The Illinois Society of Professional Engineers has a new Executive Secretary. Lawrence C. Goddard is now in charge of our State ISPE office in Springfield. In announcing their selection, the Executive Committee has, at once, given Larry a big job and given the Society a big man for the job.

Larry assumed office August 1, coming to Springfield from the Associated General Contractors of Missouri where he held the post of Administrative Assistant. In that position he followed national and local legislation affecting the construction industry and advised the membership where action seemed appropriate. He was also involved with labor agreements, safety programs and magazine publications. His duties were, in the main, concerned with labor relations and public relations.

Prior to this assignment, his activities for a period of seven years were in the field of law. Holding an LLB Degree from the University of Tennessee, he was admitted to the bar and conducted his own private practice. In this capacity, he enjoyed a wide range of experience including preparation of briefs, pretrial investigations to determine liability, court trials, business incorporations, contracts and general legal matters.

Larry's experience also includes a period in which he served on the staff of one of the major U. S. Senate Investigating Committees in Washington, D. C. While there, he made investigations from all sources of information to determine valid data for committee use in conducting private and public hearings.

His first position after graduation from college was Publicity Director for the University of Tennessee Athletic Association. This was as much a public relations post as it was publicity, involving propagation of goodwill through speeches, special color articles, coordination of press, radio and TV personnel, and programming of special films, brochure material and news releases.

A native of Tennessee, with a wife Helen and two young children, Larry, at 39, brings to ISPE a wealth of experience and ability to discharge the duties and responsibilities of Executive Secretary. According to the proposed By-Law VI published in last month's ILLINOIS ENGINEER, his duties include promoting public relations activities, working with legislators, preparing literature, making talks and working with industrial leaders, and coordinating Society activities, all toward helping ISPE-NSPE achieve their aims in furthering the professional aspects of engineering.

In selecting Goddard to carry out this assignment, many candidates were considered and several of these were carefully screened for the specific experience and general suitability for this key position. The final selection was made both enthusiastically and confidently by the Executive Committee of ISPE.

## LAWRENCE C. GODDARD



(Hammond Studio)

Larry comes to us both well qualified and enthusiastic for the challenge of this important post. We feel confident that, as we get to know him better, and he realizes that there will develop a close bond and an effective working relationship which will not only enhance the significance of the entire Society and profession, but will also afford genuine satisfaction to those who enter wholeheartedly into the works we undertake.

Bill Galler, member of ISPE, was recently awarded Professional Engineer License No. 20,000. Of course there are not that many registered professional engineers in Illinois at the present time. Some are deceased, others have allowed their registration to lapse and a surprisingly large number live and work outside the state but have had reason to become registered because of assignments connected with professional services in Illinois.

Bill, who won't have any trouble remembering his certificate number, is Sanitary Engineer with the City of Chicago's Water Safety Control Section of the Water Purification Division. He works at 3300 East Cheltenham Place. Bill is an I.I.T. graduate who received his Bachelor of Science degree in 1951. He also is a member of the American Water Works Association. Bill and his wife, Etta Joan, live at 1620 1/2 Wallen in Chicago.



**President's Message (contd.)**

Competitive enterprise is the foundation for our economic system. The one who can produce goods which are satisfactory for the purpose at the lowest cost comes out on top in business. Others fail. The general public usually asks the question why price competition should not apply also to engineering services.

Price competition for goods and workmanship is fundamentally different from price competition for professional services whether these be engineering, legal, or medical. Materials and workmanship can be observed, weighed, measured, compared and evaluated on a tangible basis, whereas results of engineering thought and skill cannot be subjected to precise measurement. The end product of a manufacturing operation can be compared with specifications which the product is designed to meet. Products produced at the lowest cost which meet the specifications therefore provide the buyer with the best gain.

Specifications for engineering brains cannot be prepared. Bidding for engineering services, therefore, is ridiculous as no standards can be established for evaluating bids. The absurdity of this procedure may be illustrated by a hypothetical situation where bids might be requested for automobiles in general. The owner might want a Cadillac but the low bids always would be received from dealers selling much lower priced cars. Not all engineers have the same aptitude, training and experience, or in the case of a consultant the same facilities, for providing required services. It is in the interest of employers and clients to select engineers with qualifications best suited for the proposed project and then, and only then, agree on a salary or fee.

In order to assist employers and clients in determining equitable compensation the Illinois Society of Professional Engineers has prepared, adopted and published salary and fee schedules. These schedules are designed to produce for the normal case a reasonable return to the engineer for his investment in education, experience, time and facilities. An employer or a client may well be suspicious of any engineer who proposes to work for salaries or fees substantially less than indicated by these schedules.

The owner should realize that the minimum overall cost of an engineering project is the important factor rather than just one segment of total cost. Inadequate investigations and analyses inevitably lead to higher construction costs than are justified. For the total project, construction cost normally is in the neighborhood of 90 per cent of the total, while engineering, legal, and other items account for only 10 per cent. It is readily seen that inadequate services resulting from inadequate compensation can produce a large increase in total cost. On the other hand competent and complete engineering normally will produce more economical construction.

ISPE should devote its talents and its resources toward promotion of better understanding of the principles involved both inside and outside the profession. All pro-

**NEW MEMBERS****National**

- Bachmann, Raymond, 1400 Taylor Street, Joliet (Joliet)—secured by D. Larson  
 Baker, Albert, 2938 W. Sherwin, Chicago (Chicago)  
 Baker, Clyde N., Jr., 780 Crescent Blvd., Glen Ellyn (Chicago)  
 Brandon, Maynard G., 1318 Mayfield Ave., Joliet (Joliet)—secured by B. Anderhous  
 Bruce, Eddie E., 219 Oak Tree Ave., Salem (Ambrav)—secured by N. Y. Alvis  
 Evans, Orville A., P. O. Box 618, Ottawa (Illinois Valley)  
 Geyer, Robert Irving, 405 W. Golf Rd., Mt. Prospect (Chicago)—secured by C. J. McLean  
 Hays, Robert D., 924 West Wood St., Decatur (Central Illinois)—secured by L. C. Auby  
 Henneman, Ralph J., Jr., 1503 Maywood, Champaign (Champaign)  
 Hirschberg, Erwin E., 1305 James Ave., Rockford (Rockford)  
 Kunst, Arnold E., 3404 W. Marquette Rd., Chicago (Chicago)  
 Larsen, Nils Edward, 2555 Fitch Ave., Chicago (Chicago)—secured by C. E. Zanzie  
 Lassen, Manuel A., 1879 N. Manassas Ct., Lexington, Ky. (Chicago)  
 Lauters, Vincent Geo., 2337 N. Walnut, Waukegan (Lake County)—secured through NSPE (transfer)  
 Mergler, Don Harmon, 25 E. Rocket Circle, Park Forest (Chicago)  
 Miller, Lester L., Route 4, Edwardsville (Madison County)  
 Pearson, Paul O., 3905 Lawn Avenue, Western Springs (Chicago)  
 Pikarsky, Milton, 2122 E. 75th St., Chicago 49 (Chicago)  
 Pritchard, Edwill H., 1609 S. Third Ave., Maywood (Chicago)  
 Schacht, Otto Wm., Jr., 6030 Sheridan Rd., Chicago 40 (Chicago)  
 Schousboe, Ingvar, P. O. Box 9, Crystal Lake (Lake County)  
 Sellner, Edward P., 1228 Larrabee Lane, Northbrook (Chicago)  
 Smothers, William E., 2718 W. Nebraska Av., Peoria (Peoriarea)  
 Storm, Robert R., 2113 Boudreau Dr., Urbana (Champaign County)  
 Treece, Bobby G., 415 N. Elmhurst Ave., Mt. Prospect (Chicago)

**Affiliate**

- Colombo, Richard G., 2209 Greengold St., Joliet (Joliet)  
 Fucik, Frank M., 9 S. Clinton, Chicago (Chicago)—secured by H. F. Sommerschield  
 Furman, John E., 559 N. Chicago St., Joliet (Joliet)—secured by Bernard Anderhous  
 Goers, Herbert G., 1702 N. Stevens, Decatur (Central Illinois)—secured by L. C. Auby  
 Legg, Lawrence E., 1040 N. Waller, Chicago 51 (Chicago)—secured by Linas Brown  
 Lucas, Stephen J., 5412 S. Rockwell St., Chicago (Chicago)

**E-I-T**

- Higgins, John P., 610 S. Glover St., Urbana (Champaign County)  
 Holmes, Alan M. C., 530 Arlington Place, Chicago 14 (Chicago)—secured by H. F. Sommerschield  
 Meckenstock, Peter J., 516 Catherine, Ottawa (Illinois Valley)  
 Schatteman, Joseph C., 22 Phillips Dr., Decatur (Central Illinois)  
 Sutton, Richard D., 514 W. North, Decatur (Central Illinois)

**Transfer-in-Grade**

- Tiona, Emil L., 912 Feldkamp Av., Springfield (Capital) E-I-T to National

**St. Clair Chapter News**

The St. Clair Chapter will visit the new Health Building at 20th Street and State Street in East St. Louis on Thursday evening, September 8. This inspection and open house will start at 7:30 P.M. Sponsor for the program is Mel Dobbs.

Professional engineering groups consider competition for engineering services on a price basis as unethical. It is insufficient, however, to say that bidding violates professional ethics. It is necessary to explain fully to the public why bidding is unsound.



# IS UNIONISM OF THE ENGINEER IN CONFLICT WITH PROFESSIONALISM?

*This is one of the top three prize-winning papers presented at the February, 1958 Chicago Convention of the American Society of Civil Engineers. The statements contained herein are those of the author and do not necessarily reflect the opinions of the ILLINOIS ENGINEER.*

*This is the second of three essays on this subject. None of the three authors are from Illinois. All attend engineering colleges in Ohio.*

Editor

By ROBERT BLANK

Student at Ohio Northern University

We must first determine what constitutes unionism and what constitutes professionalism. We can then compare the two and decide whether they are compatible or are in conflict.

First, let us examine unionism. According to the dictionary, a union is a number of persons, societies, or states joined or associated for some common purpose. This definition would fit several things including engineering societies, so we must look further. We find also that the term union frequently refers to a trade or labor union, or organization of workmen. We find unionism to be the principle of union, especially trade unionism. Labor is the people, considered as a class, engaged in bodily toil for the sake of gain or economic production.

Now let us go on to something less general than the dictionary. The Taft-Hartley law, which should provide reliable information on the subject, says in Section 2 (5), "The term labor organization means any organization of any kind, or any agency or employee representation committee or plan, in which employees participate, and which exists for the purpose, in whole or in part, of dealing with employers concerning grievances, labor disputes, wages, rate of pay, hours of employment or conditions of work."

Another term we should consider in this connection is collective bargaining, the process by which wages, hours, rules and working conditions are negotiated and agreed upon by a union with an employer for all the employees collectively whom it represents.

Next let us see what we can learn about professionalism. According to the dictionary, we find a profession to be a vocation, requiring knowledge of some department of learning or science. A professional is one engaged in one of the learned professions, and professionalism is professional character, spirit or methods.

Again, referring to the Taft-Hartley Act, we find Section 2 (12) states, "The term professional employee means any employee engaged in work

(I) Predominantly intellectual and varied in character as opposed to routine mental, manual, mechanical or physical work.

(II) Involving the consistent exercises of discretion and judgment in its performance.

(III) Of such a character that the output produced or the result accomplished cannot be standardized in relation to a given period of time.

(IV) Requiring knowledge of an advanced type in a field of science or learning, customarily acquired by a prolonged course of specialized intellectual instruction and study in an institution of higher learning, or in a hospital, as distinguished from a general academic education or from an apprenticeship or from training; and the performance of routine mental, manual or physical processes."

We could go farther into definitions but they tend to become boring, so let's compare what we have so far.

Taft-Hartley's mention of the purpose of a labor organization and the dictionary's definition of collective bargaining are quite similar—wages, hours, rules and working conditions. However, Taft-Hartley's description of a professional employee is that his work is predominantly intellectual, opposed to routine, that he consistently exercises discretion and judgment and that his output and accomplishments cannot be standardized. At least, this is inconsistent with, if not in conflict with, collective bargaining. Unionism strives for standardization of wages, hours and working conditions, while professionalism cannot be standardized.

Furthermore, Section 14 (a) of Taft-Hartley specifically bars supervisors from collective bargaining. Many of the duties of a professional engineer are supervisory in nature. He supervises the work of young engineers. He supervises the construction of the thing he has designed. So, again, we find inconsistency and conflict. Unionism required collective bargaining. Federal law forbids it for the professional engineer who is a supervisor.

What are some of the engineering organizations, union and professional? Are they compatible in principle and purpose?

The National Society of Professional Engineers (NSPE) is an organization whose objective is "The advancement of the public welfare, and promotion of the professional, social, and economic interests of professional engineers."

The Engineers and Scientists of America (ESA) whose president testified in a congressional hearing that it was a federation of unions, a labor organization, reverses this statement of objectives. It lists economic advancement first, social second, professional third and fails entirely to mention any responsibility for the public welfare.

Quoting parts of *Faith of the Engineer* which is published by courtesy of the Engineers' Council for Professional Development (ECPD) we have: "I am an en-



r. In my profession I take deep pride. I will participate in none but honest enterprise. When needed, my skill and knowledge shall be given without reservation for the public good. I pledge—integrity and fair dealing, tolerance and respect, and devotion to the standards and the dignity of our profession, with the consciousness, always, that our special expertness carries with it the obligation to serve humanity with complete sincerity."

While there are other engineer unions in addition to A which have not been quoted, I'm certain all would see public service less than collective bargaining.

It seems there is again conflict in the avowed objectives and principles of the union organizations and the professional groups.

What do the leaders of the unions and the professional groups express as their purposes? The following is quoted from the president of ESA, "Collective bargaining is by far the most direct and most potent device we have to assist us in obtaining our goal. Economic weapons such as strikes shall be resorted to when other avenues toward settlement of differences have been explored and found unworkable," and "We must expose employer dominated groups who purport to speak for engineers and scientists but who in reality speak for management, far removed from the engineering employee that they cannot possibly know his problem, his desires, or his needs." He further goes on to spell out NSPE as such "employer dominated" group.

Mr. Clarence T. Shock, P.E., president of NSPE, says the basic characteristics of a profession are "an attitude of mind," "an altruistic motive," "a kind of work—special skill on a high intellectual plane," and "an order of society such as bar, bench or clergy, a confidential relationship such as doctor to patient or lawyer to client."

Robert Williamson, P.E., says in an article entitled, *Our Stake in America* which appeared in the January, 1951 issue of the *American Engineer*, "Professionalism and responsibility go hand in hand." He further states, "If all engineers were registered and showed a solidarity of interest in their profession through affiliation with a national professional engineering society, the exertion of their influence for a common good of all would more than off-set the evils done by many other organizations of greater numerical strength."

Mr. Will D. Sampson, P.E., of San Antonio, Texas, says in a letter to the editor of the *American Engineer*, "It is impossible, regardless of the enterprise to expect recognition until it is an established fact that the vast majority of your organization are above reproach. This is especially true of a professional man."

Now let's compare these statements. The professional men speak of service, responsibility, altruism and confidence. The advocate of unionism of engineers speaks of wages, working conditions, strikes, hostility toward management and lack of confidence. Again, we seem to find conflict between unionism and professionalism.

Can professional people go before the public one day in terms of strikes and picket lines, such as are used by unions, and go before the public another day, as we do during Engineers' Week, and upon other occasions, talking of public service and asking the public to bestow their blessings and recognition?

Another facet of the problem to be considered is that unions seem to have an inborn distrust and hatred of management. There is a definite line between labor and management. Perhaps it should not be so but, nevertheless, it is. However, the engineering profession furnishes a great contribution to management, both in personnel and in technical assistance. Many engineers move up into the ranks of management. Many others must work directly with management. This requires mutual trust and respect, not suspicion and scorn.

Can professional people be a part of a union one day advocating strikes and work stoppages and be a part of management another day planning increasingly efficient production? Certainly there is conflict in being part labor and part management.

One of the obvious marks of professionalism is individualism and the right to make one's own way in improvement economically and professionally. One of the previously stated marks of unionism is collective bargaining, negotiated and agreed upon for all the employees collectively.

What are some of the harmful effects of unionism and collective bargaining? The classification of engineering positions stifles individual recognition and incentive. Opportunity is limited and advancement is retarded by seniority provisions of unionism. The standardization required for collective bargaining is a leveling force as far as salaries are concerned and results in regimentation. Confidential relationships inherent in professionalism are lost and stratification of the profession into labor and management results.

If the professional development and advancement of an individual are to be regulated as a part of his daily activities, he may or may not climb the professional ladder, but he will climb it, if at all, only on the rungs which are contained in the "agreements"; and he will climb it no faster than the agreement permits. Collective bargaining is never inspirational to the man of creative talents; and recognition cannot be readily afforded him other than as a part of the collective group.

Dr. David Steinman, the noted bridge builder, poet and professional engineer, has this to say on the subject, "The usual methods of unions—coercion, strikes, picketing, closed shop, etc. should be unthinkable in a profession.

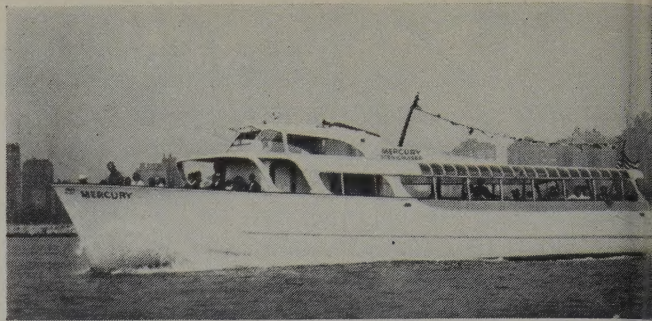
"Engineers occupy a position of confidence and trust between capital and labor and between employers and employees. Unionization is inconsistent with the highest discharge of that trust.



## PLANS SET FOR SEPT. 6 BOAT TRIP

Kenneth Cook, P.E., Chairman of the Inspection Boat Trip, announces that there are still a few vacant places for ISPE members, their families, and guests.

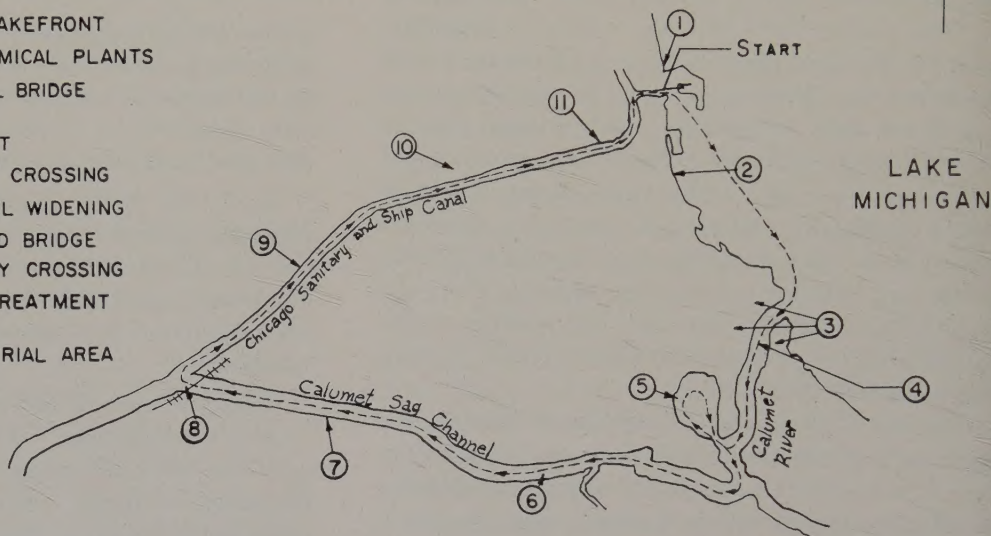
The all-day excursion, including two meals, will cost \$6.50. Leaving landing W. of Michigan Ave., at E. Wacker Drive, around 8:30 a.m., the Mercury is scheduled to return about 4 p.m. A postcard confirmation will be sent to each member holding a reservation. Those who are interested should send their check to Mr. Cook, c/o De Leuw, Cather & Company, 150 North Wacker Drive, Chicago 6, Illinois.



ROUTE FOR TRIP

### POINTS OF INTEREST

1. CHICAGO WATER FILTRATION PLANT UNDER CONSTRUCTION
2. CHICAGO SKYLINE & LAKEFRONT
3. STEEL MILLS AND CHEMICAL PLANTS
4. CALUMET SKYWAY TOLL BRIDGE CROSSING
5. CHICAGO PORT DISTRICT
6. ILLINOIS TOLL HIGHWAY CROSSING
7. CALUMET SAG CHANNEL WIDENING
8. NEW GM & O RAILROAD BRIDGE
9. ILLINOIS TOLL HIGHWAY CROSSING
10. SOUTHWEST SEWAGE TREATMENT PLANT
11. CHICAGO RIVER INDUSTRIAL AREA



## PERSONALS

At least eight of our 16 ISPE chapters were represented at the NSPE meeting in St. Louis last June 11-14. The St. Clair Chapter had a room in the Chase Hotel where they welcomed ISPE members from the Lake County, Joliet, Central Illinois, Champaign, Capital, Chicago, Madison County Chapters, as well as many from their own chapter.

Bill O'Dell and John T. Parker showed a number of Alton and Southern Railroad engineers around. ISPE past-president Ray Brichler, Art Feickert and Stanley J. Petraitis were familiar faces as were Cliff Saunders and Manuel Garcia. Then there were the "K" boys, Gerald W. Kennedy, Leo F. Koberlein and Lauren C. Kolditz.

Alex Van Praag represented the Central Illinois Chapter and Bob Brown and Melvin Amstutz did the same for the Joliet and Lake County Chapters, respectively. E. J. "Gene" Daily and Virgil Dodson came down from Champaign. Frank Edwards, C. J. McLean and John W. Townsend represented Chicago. Harry A. Kluge, John H. Knottnerus and Lee R. Schlemmer were among those from the Madison County Chapter.

## Champaign County

Ray Carroll, president, reports that their annual "Ladies' Night" was held at the Allerton House on June 5, 1958.

Professor Rudy Jones, Director of Small Home Council, University of Illinois, presented an illustrated discussion of the architectural and engineering problems relating to living in Colombia.

Professor and Mrs. Jones have just returned after living in Bogotá, Colombia, where Professor Jones was Technical Advisor to the government of Colombia on problems pertaining to housing.

In order to promote better inter-professional relations, each member was asked to invite a local architect and his wife.

Calvin G. Brown, former city engineer of Elgin, has accepted the position of Director of Public Works for Mason City, Iowa. The new position, which became effective July 1, includes responsibilities as city engineer and head of the water department.



## WANT TO GO ON RECORD?

### New Department Proposed

YOUR ILLINOIS ENGINEER Committee reported to the late Board of Direction that the purposes of this magazine included communicating between members of ISPE Society matters, inspiring a high level of professionalism, reporting on member activities, unifying the PE membership and the engineering organizations of Illinois, airing controversial viewpoints, and moreover, presenting articles of appeal to the engineer's family.

In one particular respect, it is the feeling of the Editors that there seems to be too little tangible evidence of active interest in what this magazine says—or does it say.

Surely, in the articles presented in recent months, there have been some controversial items. Surely, the entire membership of ISPE is not completely satisfied with the magazine, or with the conduct of the Society in all matters of policy or activities.

In order, therefore, to present both interesting material and to provide an open forum for Illinois Professional Engineers on new ideas or matters of controversy, we are desirous of inaugurating a new department of readers' comments to appear each month. Now we are sure you understand that as Editors, we are not going to write these comments to the Editor just to have such a department. This must be done by you who read this magazine.

It is our thought that there are many of our readers who, while ostensibly passive insofar as activities of the Society are concerned, are truly active *in thought* about the ideas embraced by our Society or the actions we take. Here, then, is the opportunity to give vent to those thoughts. Here is the place to air those ideas. Here we can kindle sparks which, given enough air, could fire

our Society and Profession into a greater light. Here is where you come in. Jot a note or compose an essay. Censure an author or fortify his thesis. Praise the word or blast the opposition.

And hereafter, let no one be heard to say that he has no voice on important matters of the Society. Nor can he say that he can't contribute to the affairs of the Society. *Through this new department, every member may submit his thoughts directly to the entire membership of ISPE.*

We urge you to take advantage of this opportunity. Our policy will be as follows:

1. We will print letters or articles of less than 250 words which are openly yet tactfully presented, and which are devoid of emotionalism and personalities.
2. We may edit letters as space requires.
3. Only signed letters will be accepted. However, signatures will be withheld on request.
4. Letters must be received before the 10th of the month to appear in the issue of the following month.

Sit down now, and send your brickbats or bouquets to:

Editor  
The ILLINOIS ENGINEER  
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Springfield, Illinois

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440 South Franklin Street, Decatur, Illinois

PHONE 8-3446



Ed Koncel, member of the Chicago Chapter, relaxes on the porch of his suburban home with his wife and children. An article on Professionalism and the Engineer by Mr. Koncel appears elsewhere in this issue.

We can often do more for other men by correcting our own faults than by trying to correct theirs.—FENELON.



# IS THE ILLINOIS P.E. ACT STRONG?

*This is the second of three articles by Mr. Zummer, a patent attorney, who is a member of ISPE. The first article appeared in the June issue.*

By ANTHONY S. ZUMMER, P. E.  
*Member of the Illinois Bar*

The Courts have not yet decided the strength of the Illinois P.E. Act, but it is possible to make an "educated guess" as to what scope the Courts will give the Act. In Illinois, the final determination of the scope and validity of any Illinois statute resides with the Supreme Court of the State of Illinois. That Court consistently follows general legal principles in interpreting statutes in order to give the law continuity. By applying these principles and using sound legal reasoning, it is possible to forecast what decision the Court may reach in a given situation.

A question of utmost importance is, what is professional engineering under the Act. Section 2 of the Act states, "A person practices professional engineering within the meaning of this Act who plans or designs the physical parts of the following:" and the Section enumerates a large number of items. Whether these items are merely illustrative or exclusionary is a point of law which must be decided by the Courts. A very good argument may be made to the effect that the items enumerated in the Act are merely illustrative and that a Court may find that the Act goes beyond the items enumerated; therefore, the Act may be much broader than it first appears upon a mere reading of the words in the Act. This theory is not novel to ordinary statutory interpretation, but rather the theory that is often followed.

Looking now to a specific situation and the legal aspects of the situation, assume that Joe Doe, who is not a P.E., advertises as an Air Conditioning Engineer. Doe's work consists of repairing air conditioning equipment and changing air filters for that equipment.

Whether Joe Doe violates the law depends upon the interpretation given the Act. Section 2 of the Act specifically mentions "air conditioning plants." Section 1 of the Act provides, "It is unlawful for any person not so registered to practice Professional Engineering in this State, or to use in connection with his name or otherwise assume, use, or advertise any title or description implying that he is a Registered Professional Engineer." A title of Air Conditioning Engineer may be interpreted to mean that a person advertising that title plans or designs the physical parts of an air conditioning plant. It follows that by implying that one designs and plans air conditioning plants, one is a Registered Professional Engineer. It may be said that such advertising is in violation of the P.E. Act, and the person so advertising may be held liable under the Act.

Consider another specific situation, one in which a person not registered under the Act designs a milling machine for a specific purpose. Milling machines, as such, are not mentioned in Section 2 of the Act, but the Act does mention "plants for the transmission distribution of power" and "plant for the refining, alloying or treating of metal." Upon first reading, one would say this has nothing to do with milling machines, but the Court has never directly held on the question of what constitutes a "plant" under the P.E. Act. Must a plant be an entire factory, or may it be a single machine? The Court may find that a plant is a single machine under the Act and find that the designer violated the Act.

Therefore, the scope of the Illinois P.E. Act is limited only by the interpretation that the Courts give to the Act. However, the strength of the Act depends upon the Engineering Profession, because the Court cannot act until the culprit is brought to the Bar of Justice by a complaint.

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## Items of Personal Interest

DuKane Chapter President **James E. Scott** reports that his family is planning an August vacation which will include the whole family.

Jim and Grace expect to pack 3½-year-old Judy and 6-month-old Linda into their station wagon and head for Canada. If the girls object too much, the trip may be curtailed and they will end up at a cottage in Minocqua or Haywood, Wisconsin.

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**Konzo, Carrol & Bareither** are keeping busy these days with their consulting practice, J. Raymond Carrol & Associates, Champaign-Urbana.

Most of their work is on heating, ventilating and air conditioning engineering. They have a few industrial and commercial buildings and a new interesting hospital job in Shelbyville. Most of their more recent work has been district steam heat conversions to gas systems in the downtown areas of Champaign-Urbana, Danville and Decatur. These jobs introduce those challenging problems that make engineering so much fun. The revisions necessary to existing buildings and heating systems require considerable ingenuity and engineering know-how in order to accomplish an economical and yet satisfactory system.

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The **Ambraw Chapter** held its June 12th meeting at Lake Centralia. . . . Barbecue and the works!



## — 2000 —

Dear Fellow Member:

It is most gratifying to report that we are gaining momentum. All but three chapters have now shown increases in memberships.

Every chapter membership committee chairman is enthusiastically cooperating. It appears this will be the first year of an era of unusual progress in ISPE.

Each of us is anxious for the elevation of our Profession. A progressive Professional Society can do more to make this a reality than any other medium.

It is not possible for all of us to be the leaders of the Society. We can all solicit the interest of our fellow Professional Engineers in our Society.

**YOU CAN HELP!!!**

**WILL YOU?**

**YOUR MEMBERSHIP COMMITTEE**

## — 2000 —

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## NEWS OF THE CHAPTERS

### Clair

Manuel Garcia heading a committee composed of Ed Meek and Fred Friedwald has been busy arranging talks and panel discussions pertaining to professional engineering and held for high school groups.

### iet

Wayne Madden is leading a movement to form a new chapter in the Park Forest-Chicago Heights area where there are about 440 registered engineers.

### Central Illinois

The Wives of Engineers Club, which is the auxiliary of the Central Illinois Chapter has elected the following as officers for the ensuing year:

President—Mrs. Robert W. Kopetz

Vice Pres.—Mrs. George P. Wilson

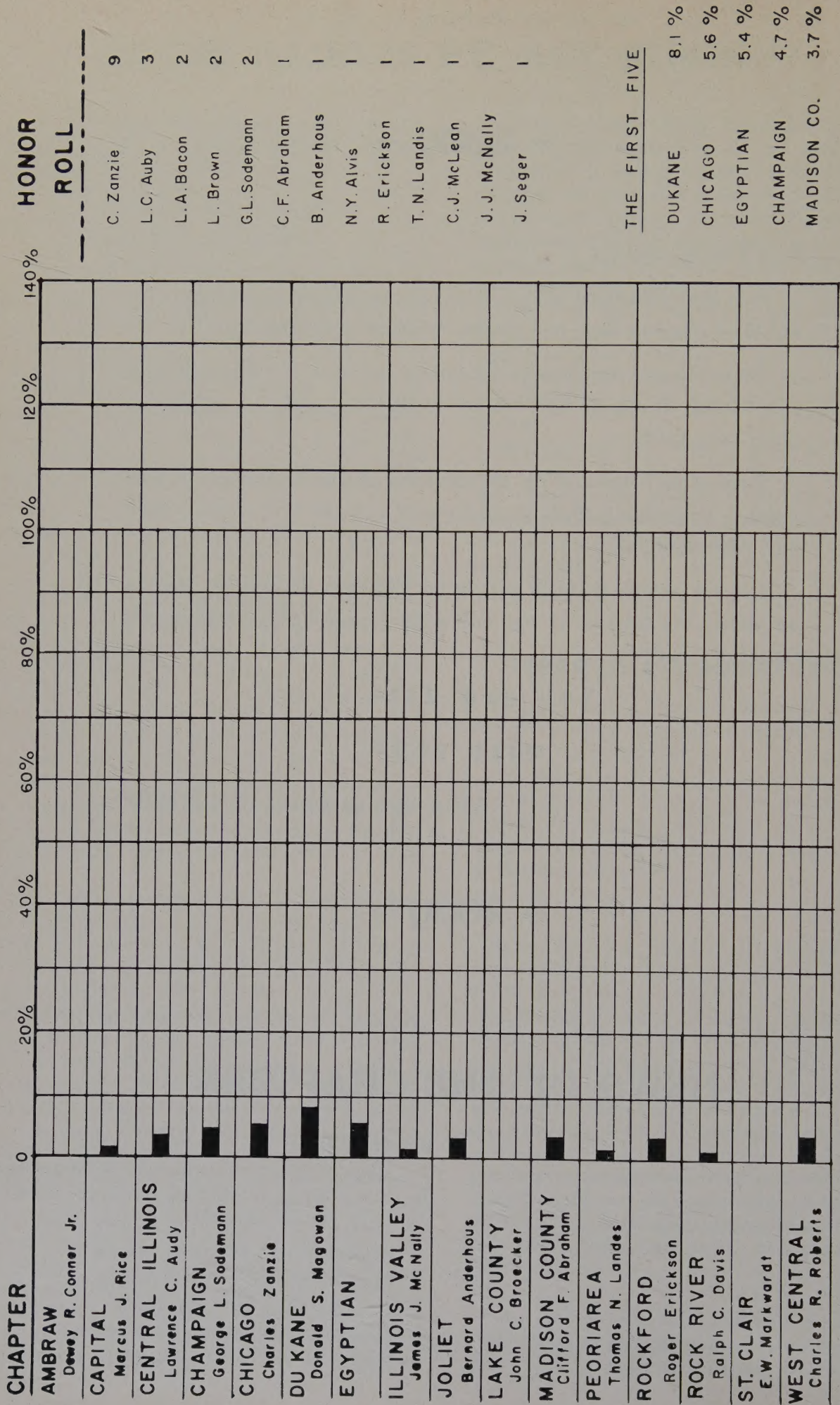
Secretary—Mrs. M. Dean Wurth

Treasurer—Mrs. Howard H. Fukuda

Member of the Board—Mrs. G. Lorenz Miller



# ÷ MEMBERSHIP CAMPAIGN PROGRESS ÷





# NSPE AND ISPE

## *offer* REGISTERED PROFESSIONAL ENGINEERS

- 1 **MEMBERSHIP** in the only active, established organization devoting its entire effort to the professional, ethical, economic and social aspects of engineering.
- 2 **AFFILIATION** with the only national society composed exclusively of registered engineers from all branches of the profession.
- 3 **A SINGLE, POWERFUL VOICE** which speaks for a cross-section of the engineering profession.
- 4 **PERSONAL PARTICIPATION** in its overall program for the advancement of professional ideals and concepts.
- 5 **A CAMPAIGN FOR PUBLIC RECOGNITION** of the profession's contributions to national progress and welfare.
- 6 **A CONSTRUCTIVE PROGRAM** designed to raise the economic and social status of professional engineers.
- 7 **CONTINUOUS ACTION** to improve registration laws and their administration.
- 8 **STANDARDS OF PROFESSIONAL CONDUCT** through its Canons of Ethics and continuous interpretation of this code in terms of current practices within the profession.
- 9 **PROTECTION** of the profession and the public against misrepresentation in engineering practices by those not qualified.
- 10 **AN OPPORTUNITY FOR YOU** to contribute suggestions and exchange ideas with members of all branches of engineering for the good of the profession.
- 11 **A PROGRAM** designed to offer the student engineer more adequate preparation for professional life.
- 12 **CONSTANT EFFORT** with the military to insure maximum utilization of the engineer in time of national emergency.
- 13 **AN OPPORTUNITY** to assist young engineers in meeting professional problems.
- 14 **ON-THE-SPOT REPRESENTATION** in national, state and local matters affecting the welfare of engineers.
- 15 **UP-TO-THE-MINUTE REPORTS** on legislative and legal events with which the profession is concerned.
- 16 **AN ORGANIZATION** to foster and stimulate engineering leadership in public service activities on a community, state and national level.
- 17 **SUBSCRIPTIONS** to national, state, and other publications as a part of membership dues.



ILLINOIS SOCIETY OF PROFESSIONAL ENGINEERS, Inc.  
817 Myers Building, Springfield, Illinois

Date.....

To the Board of Direction of the  
Illinois Society of Professional Engineers:

I hereby apply for admission to the Society as a.....  
National, State, E-I-T, or Student  
member. If admitted, I agree to comply with the terms of the Constitution  
and the Code of Ethics of the Society, and wish to be enrolled in the

.....Chapter.

FOR OFFICE USE ONLY

Appl'n Reed. ....

Amount Enc. ....

Ref. Written.....

Ref. Reed. 1..... 2..... 3.....

Presented to Bd. ....

Elected.....

Notified.....

I. ALL APPLICANTS complete the following ten spaces:

1. Full Name.....Name of Spouse.....  
Last First Middle CHECK PREFERENCE MAILING ADDRESS

2. Residential Address.....Phone.....  
Street City State

3. Business Affiliation.....Position.....

4. Business Address.....Phone.....  
Street City State

5. Registration.....Reg. Number.....  
(Type of Certificate: Prof. Eng., Struct., etc. State Issued)

6. Engineering Field.....  
(Civil, Electrical, Mechanical, etc.)

7. Technical Society Affiliations and Grade of Membership.....

8. Birth.....Date.....Place.....Age.....Sex.....

9. Education.....Years.....School.....Date of Graduation.....Degree Obtained.....

10. Recommended by.....Signature.....

II. If you are NOT REGISTERED as a professional engineer, structural engineer or an E-I-T, complete the balance of the application form.

Names, addresses, and professional connections of three persons who may be consulted concerning my qualifications (preferably professional engineers who are members of this Society; action will be expedited by accompanying this application with the letters of reference).

1. ....Name Title Address Member NSPE-ISPE

2. ....

3. ....



## REGISTRATION EXAMINATIONS

In 1949 the Illinois Society of Professional Engineers requested that the University of Illinois develop a review refresher course to help engineers prepare themselves for the state examination required for licensed professional engineers.

The Division of University Extension in cooperation with the College of Engineering and ISPE developed a program, and has been offering some 20 to 30 refresher courses each year in various towns and cities in the state since then.

This non-credit course is planned primarily for graduate engineers or the equivalent who wish to take the examination for registration as licensed professional engineers. It offers a brief review in the fundamentals of engineering—mathematics, mechanics, electricity and strength of materials. The content of this course is primarily devoted to the solution of typical problems in the fields of engineering economics, civil engineering, mechanical engineering and electrical engineering with emphasis on the fundamental laws involved in their solution.

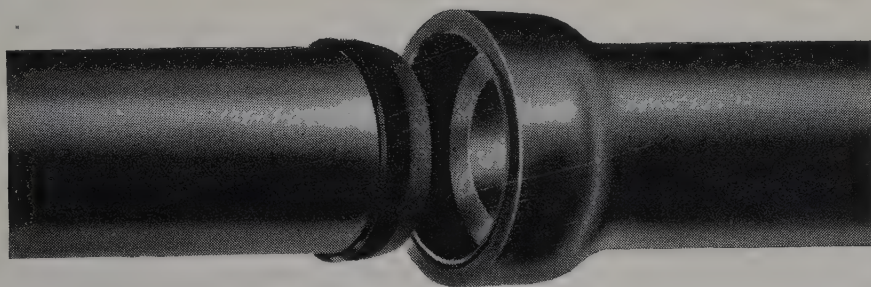
Registration for the course is completed at the first meeting. A fee of \$17.50 in the form of a check or money order is payable to the University of Illinois at that time. The course meets one night each week for six hours over a period of eleven weeks. Courses usually begin in September or February.

Local ISPE chapters may survey their membership to determine the extent of interest in the professional engineers refresher course. If 15 or more persons desire the course, the chapter is urged to contact the Division of University Extension, University of Illinois, Urbana, or one of the field representatives at least one month in advance of the desired starting date. Moreover, classes may be arranged any place in the state where 15 or more persons intend to enroll.

The next professional engineering examination offered by the State Department of Registration and Education is scheduled for November, as indicated below. Examinations for structural engineers and land surveyors scheduled for 1958 are also shown.

<i>Examination for</i>	<i>Register by</i>	<i>Test Dates</i>
Professional Engineers	September 20	November 20-21
Structural Engineers	October 17	December 17-18-19
Land Surveyors	October 21	November 5-6-7

In order to take the examinations on these dates, it is suggested that an applicant obtain the necessary papers at least one week or more before the registration deadline in order to obtain the required school transcripts, references, and to complete the required forms. The papers are available from the Department of Registration and Education in Springfield or from your local State Office.



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# DOES AN ENGINEER HAVE A RIGHT TO BE CALLED A PROFESSIONAL MAN?

By EDWARD F. KONCEL, JR., P.E.

We are not living in a Garden of Eden so everyone must work for a society to exist. Good work has nobility and dignity when one is using his talents to the fullest—this applies equally well to the ditch digger and the eminent surgeon. Though there is nobility and dignity to all forms of work, there are certain occupations which command a greater degree of respect, and therefore responsibility, by fellow men than others. Professions are quite high by these standards. Therefore if engineers want to enjoy professional status, they must meet the obligations that come with the privileges.

## What Is A Profession?

Let us examine: What is a profession? Carl F. Taeusch in his book *Professional and Business Ethics*<sup>1</sup> says, "A profession consists of a limited and clearly marked group of men who are trained by education and experience to perform certain functions better than their fellowmen." C. W. Griffin Jr. in his article "How Professional is Engineering?"<sup>2</sup> says a profession has a "monopoly of a special type of knowledge and skill, the principles of which are acquired through rigorous educational process" and that "this condition alone distinguishes a profession from a trade." He further states that "... professional men determine standards and laws, directly or indirectly, by which they are governed in their professional lives." For example, construction codes govern the engineer in his work but the source of the provisions of such codes is the engineering profession. There is a quotation in R. G. Warner's article "Professional Aspects of the Practice of Engineering"<sup>3</sup> that states "A professional man must, of course, possess special knowledge and skill and the ability to exercise them but, of equal or greater importance, he must possess altruistic characteristics and must conform rigidly to a code of ethics of a high order." W. E. Wickenden, in "The Second Mile A Re-Survey,"<sup>4</sup> says "Professional status is therefore an implied contract to serve society, over and beyond all specific duty to client or employer, in consideration of the privileges and protection society extends to a profession.

Thus the characteristics of a profession might be summed up as follows:

1. Special type of knowledge and skill acquired through rigorous educational process.
2. A limited and clearly marked group.
3. Generation from within of rules and regulations governing application of special knowledge to public uses.
4. Codes of ethics governing conduct.
5. Readiness to serve society, above specific duty to client or employer.<sup>5,6</sup>

## Ethics<sup>1, 7, 8, 9</sup>

C. W. Griffin Jr. says, "... ethical codes might be conceived as a means of filling the implied contract between society and a profession ... codes have two related aims: to guarantee the public a high degree of technical competence and honor in the conduct of professional business, and to maintain a high standard of integrity within the profession itself."<sup>2</sup> W. Wickenden in comparing the codes of physicians and lawyers with those of the engineers says, "as engineers our codes are less tangible and the means of enforcement less explicit, in proportion, as our duties are less definable, but our ethical obligations are no less binding morally."<sup>4</sup> There now exists "Canons of Ethics - Engineers" made up of 28 sections covering professional life and relations with the public, with clients with employers, and with engineers. These canons have been adopted by 82 engineering organizations. As engineers we should make it our duty to know what they contain and to follow them.

## Individual Ethics

Earlier it was noted that C. W. Griffin Jr. pointed out that one aim of codes of ethics is "to maintain a high standard of integrity within the profession itself." Integrity may be defined as soundness or wholeness throughout. This indicates that professional men should follow codes of individual ethics in addition to codes of business ethics. Theodore Roosevelt, one of our outstanding presidents, said, "We've got to be decent. The first essential for a man's being a good citizen is his possession of the home virtues ... based on recognition of the underlying laws of religion and morality ... which if broken mean the dissolution of civilization. No man can do good work in the world for himself, for those whom he loves who are dependent upon him, for the State ... unless he can control his passions and appetites, and force head and hand to work according

## ABOUT THE AUTHOR

Last December, a young PE working for Commonwealth Edison Company in Chicago put the final touches to a paper on engineering professionalism. In presenting his paper on December 18, 1957 before the Western Society of Engineers, Mr. Edward F. Koncel, Jr., revealed himself to be one who had done a great amount of research on the subject of ethics, professional practices, unions for engineers, and engineering societies. It is probably safe to say that he knew more about why he should belong to ISPE-NSPE than did a number of the ISPE members who heard him.

It wasn't long before his application blank was received, processed and he became an ISPE member. As co-chairman of the Chicago Chapter Inter-Professional Relations Committee, he was one of those instrumental in arranging a meeting where Dr. M. S. Coover, past-president of AIEE, and Allison C. Neff, past-president of the NSPE, discussed professional unity with representatives of 25 engineering societies.



he dictates of conscience. Sins against pure and thy life are those which of all others are sure in the to be visited most heavily upon the nation in which take place."<sup>10</sup> These words apply to everyone no er what his occupation or his state in society, and e so to a professional man who maintains his status ours a day and whose conduct sets a norm for many wers. Specifically, unless engineers and our tech- l societies, foster good, decent entertainment when neers get together for fellowship, engineers will not oked upon as decent citizens, let alone professional Lascivious entertainment is beneath the dignity of essional man, casts doubts on the integrity of the neering profession, and is an insult to the family of engineer.

n example of what can be done in a positive way is trated by one major engineering society. Formerly, rder to cover miscellaneous expenses of their annual vention, they held a for-men-only smoker. Two years this was replaced with a husband-wife night of din- entertainment, and dancing. The affair proved to o successful that it was repeated again last year, and ppears that it will continue to be the budget balanc- affair in the future. Many times objections to in- ent entertainment have been passed over as "Oh, it hat the fellows want." This was the response a man Oklahoma kept receiving when he had objected to the ality of the entertainment at his organization's an- l meetings. He challenged the officers of the organi- on to poll the entire membership and they found a majority (77 per cent) of the members were not favor of the type of entertainment put on at the ual meetings. The society officers recognized the re- s of the poll and changed the character of the annual ting.<sup>11</sup>

ve can all do a great deal of foster individual ethics, ve are not afraid to stand on our own two feet and eally and tactfully object to what we know is not mply and professional conduct. C. F. Taeusch es, "Every professional and business man is in a l sense his brother's keeper to the extent of being an mple of the right mode of conduct and thereby in- ectly admonishing his less conscientious fellow mbers."<sup>1</sup>

### Employees' Responsibilities<sup>12</sup>

Engineering employees have certain obligations to form if they expect to be treated as professional men. ey should be willing to:

1. Keep abreast of technical developments.
2. Accept responsibility, make decisions, and not lean on their supervisors.
3. Make a truly maximum effort on the job.
4. Help management make wise decisions by recognizing management problems and giving assistance where possible.
5. Take an active part in a technical society.
6. Take an active part in a professional society.

7. Become a registered professional engineer.
8. Promote professional attitudes and ethical practices.

### Employer's Responsibilities

Probably the most characteristic difference between doctors or lawyers and engineers is that most of the doctors and lawyers are self employed and most of the engineers are not.<sup>3,8</sup> The self employment status forces the doctors and lawyers to apply the knowledge of their professions and to act professionally. A company which employs engineers has a debt to society to provide a professional climate for the engineers so that they can make full use of their abilities and training.<sup>6,7,12,13,14,15,16</sup> Engineers do not desire to be treated like prima donnas but merely want an opportunity to do real engineering, and to receive proper recognition and respect for abilities and knowledge. In a more specific sense, the professional climate should contain desirable working conditions such as:

1. Sufficient working space and accommodations—not necessarily a private office but accommodations in keeping with his status.
2. Adequate clerical assistance and assistance for routine technical matters.
3. Library service.

The climate should also contain respect for the engineer in such ways as:

1. The matter of time clocks or their equivalent and working hours.
2. Keeping the engineer informed of company policy and changes.
3. Permission to sign all work and encouragement to use the letters P.E. after the signature if the engineer is a registered professional engineer.
4. Provision of time off to take part in activities of technical and professional societies.
5. Salaries commensurate with job responsibilities and with those paid to starting engineers.
6. Recognition that engineering has moved along and is moving along at a rapid rate and that jobs that at one time required the work of engineers have now been standardized to the extent that they can be delegated to technical assistants.
7. Provision of a special personnel department of several men to follow and deal with the needs and problems of the engineers.
8. An encouragement and recognition of professional registration.

### Registration<sup>4,13,17</sup>

We now have engineering licensing or registration laws in every state. This did not happen over night but was accomplished by diligent efforts on the part of truly professional men. Possibly the most common reply made by engineers in regard to registration is "Why should I register? I don't have to sign any important documents, my supervisor is a registered engineer and he



signs them." How can this type of person expect the company to delegate the responsibility to him if he is not legally qualified to accept it? Some of the gripes you hear from engineers are really about privileges that are normally extended to a professional man. If an engineer will not take the first step, that of registration, how can he expect the privileges? Registration indicates that an engineer has a sense of responsibility for his work and a readiness to assume responsibilities. It also indicates he has a high regard for the field of engineering and that he is desirous of conducting himself in a professional manner.

Preparation for the licensing exam forces the engineer to adopt a broader outlook for his particular field and for engineering in general. Many engineers during this time of preparation are exposed for the first time to the subject of engineering economics which plays a vital role in professional engineering.

#### Professional Society<sup>14, 18</sup>

The engineer needs a technical society, such as the AIEE, ASME, etc., for his particular branch of engineering to foster the advancement of the knowledge of that field. In addition, an engineer also needs a professional society as W. E. Wickenden states "... to safeguard occupational and economic welfare ... to protect him against unethical competition, against indiscriminate use of the title 'engineer,' ... against all influences which might undermine public confidence in his integrity and competence ... against those who assume "that he is just another employee" and against sub-professional groups seeking to act for engineers in the process of collective bargaining. He needs the benefits of prestige built up by group publicity. He needs a collective instrument for shaping public policy in the realm of his responsibility. It is true that a professional organization is primarily a moral agency and not in itself an economic or political pressure group, but in the long run moral agencies are the more powerful and enduring."<sup>4</sup>

Several organizations are working toward the end of fostering professionalism for the engineer. This has probably confused the engineer, to say nothing of the general public. The National Society of Professional Engineers has as its membership, individual, registered engineers. This organization operates on a national level, on a state level through state societies, and on a local level through chapters of a state society. Membership in a state society usually includes membership in a local chapter and in the National Society and only one set of dues is paid. The National Society has done much to keep engineers professionally conscious. It has made numerous significant surveys of those things directly related to the engineer and the treatment of an engineer as a professional man. The national and state societies are constantly following all national and state legislation to protect the interests of the engineers.

#### Conclusions

Therefore, in answer to the question, "Does an Engineer Have a Right to be Called a Professional Man?" say, yes, if he is: willing to live up to the obligations of a professional man—willing to maintain technical competency in his field, willing to follow codes of business and individual ethics, willing to be of service to society, willing to become a registered professional engineer, willing to become an active member of a technical society and a professional society, and willing to encourage others to do those things he deems necessary for advancement of his profession.

And why professional status? Not for increased social status, but because engineering is playing a more and more important role in society. Professional status should provide the engineer with the necessary freedom and opportunities to make full use of his knowledge and talents.

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## CONSTITUTION COMMITTEE SETS TIMETABLE

At the Executive Committee Meeting July 19, action was taken to expedite the adoption of a new Constitution and By-Laws for the Society. In order to do this before the end of the year, Chapter Committees and Members are asked to make comments and suggestions about the draft of proposed Constitution and By-Laws which was published in the July issue. These should be in the Secretary's Office by September 30, 1958.



Arthur J. Kessel, a member of the Constitution and By-Laws Committee, is one of the Capital Chapter's representatives to the Board of Direction.

The Executive Committee will review the comments at its meeting, October 4.

The Constitution and By-Laws Committee will receive the draft in October for publication in the November ILLINOIS ENGINEER.

The Board of Direction will make final review of the revised draft at its meeting on November 1.

Ballots on the new constitution will be mailed in November with dues notice.

It is the duty and privilege of all members and Chapters to make their ideas on this matter known promptly so that the above schedule can be achieved.—CJMc.

### COMING EVENTS

Central Illinois Chapter . . . . .	Aug. 21
Joint with Association of Architects of Decatur	
Champaign County Chapter . . . . .	Sept. 4
Inspection Trip	
Board of Direction, Allerton . . . . .	Sept. 6
Chicago Chapter . . . . .	Sept. 6
Cal Sag Inspection by Boat	
Madison County Chapter . . . . .	Sept. 9
Lake County Chapter . . . . .	Sept. 17
St. Clair Chapter . . . . .	Sept. 18
Health Building Inspection & Open House	
Illinois Valley Chapter . . . . .	Sept. 23
Peoria Chapter . . . . .	Sept. 23
Northmoore Observatory Trip—Ladies Invited	
Chicago Chapter . . . . .	Sept. 27
Golf Outing	



Constitution and By-Laws Committee member Jack Gardner. Jack is a member of the firm of Warren and Van Praag, consulting engineers of Decatur.

## NORTH SHORE CHAPTER

On June 24, a dozen members of the Chicago Chapter met in the Faculty Lounge of Northwestern Technological Institute building to discuss the formation of a North Shore Chapter of ISPE. The meeting was called by Herbert Fox, Chairman of the Chicago Chapter's North Shore Chapter Committee. George Chlebicki represented the State Chapter Activities Committee, which is concerned with the organization and development of new chapters.

The meeting, which was the second organization meeting called by Fox, was permeated with enthusiasm to form a north shore chapter. The plan of forming a sub-chapter, which had been considered a few years ago, was ruled out; everyone felt that the organization should be another chapter of ISPE.

Another meeting of the interested group was called for August 5th. Captains will be appointed for each of the villages where ISPE members live. They will be furnished with the typewritten lists of all registered professional engineers who live in their towns as shown by the State of Illinois, Department of Registration and Education roster for 1957-58.

A meeting is planned for Tuesday, September 23rd. At this time the committee plans to have a petition prepared for the organization of the chapter. This meeting will have as its site the Portland Cement Association Laboratory in Skokie where a large auditorium and excellent cafeteria privileges are available.

Nicholas Costes, P.E. left the Wilmette Ice, Snow and Permafrost Laboratory of the U. S. Corps of Engineers and flew to Greenland last month. He will remain there with a team of scientists and engineers who are studying the problems involved in constructing pile foundations on snow. They will return the first week in September.



### Is Unionism . . . (Contd.)

"Unionization is identified with the trades. Unionization of engineers undoes the work of years in winning public recognition of engineering as a profession.

"Unionization is inconsistent with the professional spirit and attitude which places service before profit, the honor and standing of the profession before personal advantage and the public welfare above all other considerations."

What has been the experience where unionism of engineers has been tried? Last May 8, an election was held at Minneapolis-Honeywell plant as to whether the engineers wished to continue to be represented by the ESA, become affiliated with UAW, or have no union representation. With 93 percent of those eligible casting ballots, the result was in the ratio of nine favoring no union, three favoring the UAW and two favoring the ESA. In this case, engineers who had experienced a trial at combining unionism and professionalism, emphatically rejected unionism.

Dr. William E. Wickenden says, "Every calling has its mile of compulsion, its daily round of tasks and duties, its standard of honest craftsmanship, its code of man-to-man relations, which one must cover if he is to survive.

"Beyond that lies the mile of voluntary effort where men strive for excellence, give unrequited service to the common good, and seek to invest their work with a wide and enduring significance. It is only in this second mile that a calling may attain the dignity and distinction of a profession."

So it seems there is definitely conflict between unionism and professionalism. Shall we go the first mile of unionism and survive or shall we go the second mile of professionalism and retain dignity and distinction?

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### New IIT Curriculum

A new undergraduate curriculum in engineering sciences has been announced by Illinois Institute of Technology, Chicago.

The program, leading to a bachelor of science degree in engineering sciences, will stress mathematics and science and basic courses in several phases of engineering according to Dr. Ralph G. Owens, dean of engineering and co-chairman of the IIT curriculum committee.

Owens stated that the new curriculum is designed to satisfy growing demands from industry and government for men trained to develop and apply fundamental engineering knowledge.

"As a result of this basic training in engineering science, Illinois Tech will produce an engineer-scientist who is capable of working in many fields, including relatively new ones such as automation, electromechanics, computation, and rocket and nuclear research," explained.

Dr. Peter Chiarulli, chairman of the IIT mechanical department, will administer the new program.

Planned to serve the needs of engineering students who have a definite aptitude for mathematics and science, the program will provide the best possible training for research, development, and high grade design work in engineering, said Chiarulli.

Under the new program, courses in the engineering sciences—heat transfer, thermodynamics, electrical theory, properties of materials, and advanced mechanics—will be stressed.

An integral part of the curriculum is elective sequences which produce a concentration in an engineering or science field. This concentration enables the graduating student to advance either to industry or to graduate school in that particular field.

Further information may be obtained from the Director of Admissions, Illinois Institute of Technology, Technology Center, Chicago 16.

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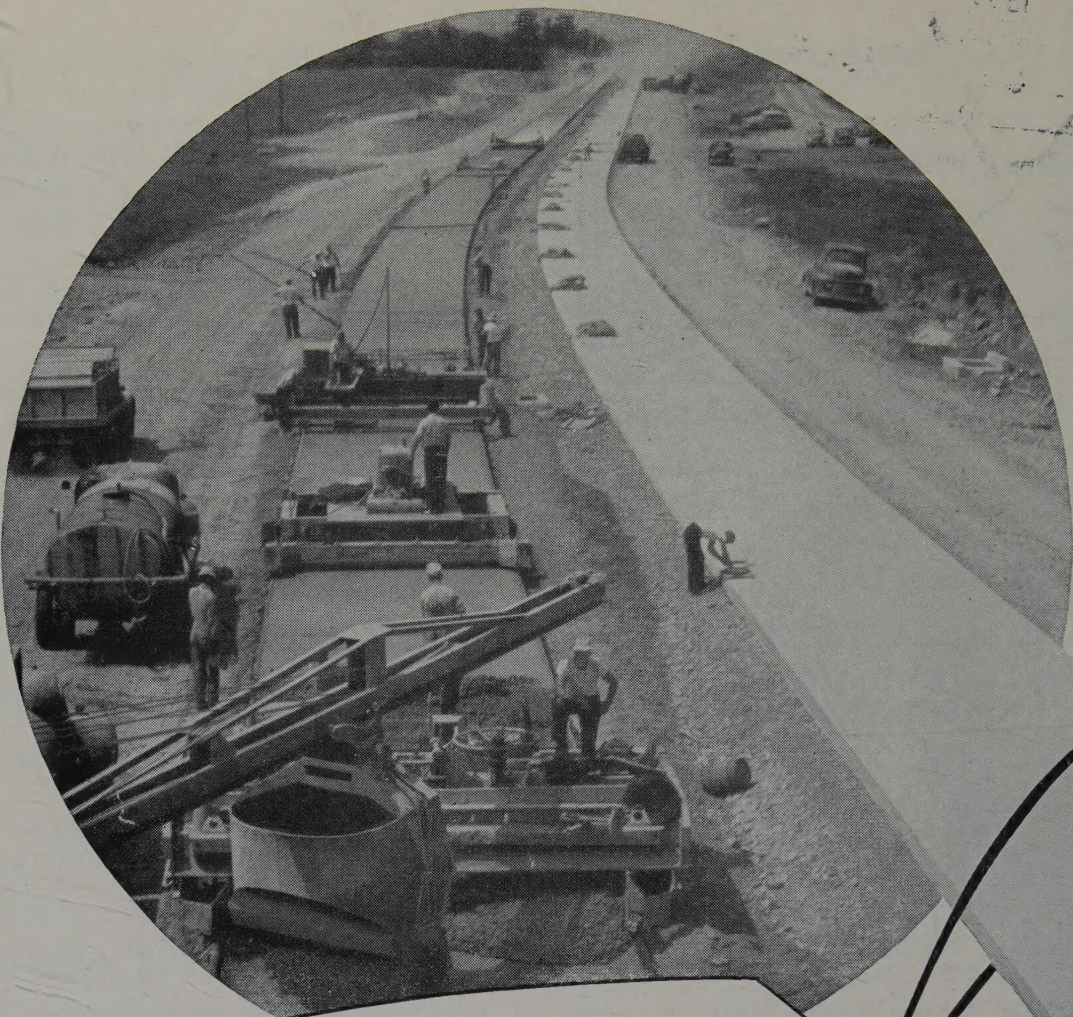
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## Mr. and Mrs. Gerald M. Marks

Parents of Daughter

Chicago Chapter Secretary Gerald M. Marks is the proud father of a 7 lb. 9 oz. baby girl, who was born at the Michael Reese Hospital on June 12. Leslie Ann and Mother, Audrey, are doing very well. Gerry reported that only the father was in bad shape.





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